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CONSTRUCTION CONTRACT CLAIMS

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1988, 115 Pages, Master of Engineering
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ABSTRACT

The number of construction contract claims and their associated damages have risen significantly in recent years. Owners and contractors must endeavor to curtail this phenomenon to keep construction costs and ultimately expensive lawsuits to a minimum. Those working in the construction industry must have at least some knowledge of contract law and in particular contract claims in order to resolve disputes which may otherwise escalate to some formal disputes resolution proceeding. The purpose of this report is to study virtually all facets of construction contract claims from the perspective of both public and private contracting. Various contract types are discussed with their associated risks and tendencies toward disputes. The different types of claims encountered in the construction business (categorized as constructive changes, acceleration, changed condition, schedule change, and delays) are discussed in detail and are reinforced using numerous illustrative examples from actual court cases. These court decisions, many of which are from federal construction contracting, form the basis for interpreting and discharging the contract parties' responsibilities. Therefore, this report can be used as a reference for construction managers, contracting officers, contract administrators, contractors, and owners to help determine contractual responsibilities. The concept of claims management is discussed, which is a program established by the owner to keep claims to a minimum, or at least from escalating to a formal disputes forum. Finally, procedures available for disputes resolution (negotiation, arbitration, litigation, etc.) are discussed.

CONSTRUCTION CONTRACT CLAIMS

BY

DANIEL W. BOWHOLTZ

A REPORT TO THE GRADUATE COMMITTEE
OF THE DEPARTMENT OF CIVIL ENGINEERING IN
PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF MASTER OF ENGINEERING

UNIVERSITY OF FLORIDA

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CHAPTER ONE

LEGAL ASPECTS OF CONSTRUCTION

The construction industry is an extremely diverse field of study and practice. Keeping pace with the ever-changing technologies of design and construction have practically forced engineers to become specialized within their particular disciplines. An extremely important aspect of the industry which cannot be overlooked by the construction engineer or any other member of the construction team is the legal environment in which we must operate.

Regardless of whether an attorney is a permanent or part-time member of the construction team, the contractor or the owner's technical representative should have a basic understanding of the law to know when legal counsel is necessary. By having a working knowledge of the law, and in particular legal aspects of the construction industry, disputes between owners and contractors could be minimized. By carefully selecting the appropriate contract type, the owner can manage the risk allocated to himself and the contractor. The contents of the contract form the basis of disputes resolution.

What is a Claim?

When the two parties cannot agree on an implied or expressed provision in the contract, the owner or contractor

will likely present a "claim" to the other party. The term claim, although often considered derogatory, should carry a neutral connotation. Generally speaking, a claim is a party's demand for a right owed them by the other party under the terms of the contract. Perhaps a more specific definition could be any legitimate request or demand for a contract adjustment in the event some change or ambiguity arises which alters the original terms of the contract. Then is a request for a change order considered a claim? It can be, depending on the reaction of the other party to the request and whether an equitable adjustment is reached.

Although there are varying schools of thought for defining at what point a claim materializes, for the purposes of this report, a claim will be regarded as a contract demand which the parties will be unable to readily agree upon. After all the parties' attempts to negotiate the demand have been exhausted to no avail, their last resort to settle their differences is through some formal disputes resolution forum, e.g., arbitration or litigation.

Counting the Cost

Given a thorough understanding of the implied and expressed conditions of the contract, and having a working knowledge of the construction industrys' legal aspects, in particular construction claims, the owner and contractor can more easily resolve their differences. Few contract disputes

reach the courtroom not only because of the high cost of litigation, but because both parties are reasonable enough to rely on case history to settle out of court.

Although a very small percentage of contract disputes are resolved in a court of law, quite often attorneys are brought on board to assist the parties in developing and resolving a case. While gathering facts on the case, the attorney will consult case history to determine if precedence exists for the dispute in question. Armed with this information, counsel will advise the party, depending on the outcome of his research, whether to settle or litigate. By having a knowledge of case precedence in contract disputes, the contractor, owner, construction manager, contract administrator, etc. could more effectively manage claims. Instead of constantly relying on an attorney's advice, one could avert claims and resolve them in a much more timely manner.

Are we suffering from "litigation pollution"? The evening news and newspapers often focus on multimillion dollar court settlements, the rising cost of medical malpractice insurance, and the increasing number of civil court cases decided in this country.

The construction industry is certainly not immune to this phenomenon. According to the American Arbitration Association, the dollar value of claims submitted rose from $100 million in 1979 to over $376 million in 1981 for

non-residential construction alone. Add to the 1981 figure an estimated $600 million in claims that were resolved within a short period after contract completion, one can easliy see the significance of the problem. The $1 billion in claims produced an estimated $740 million liquidation of Contractor net worth. For purposes of illustration, consider in 1981, the net worth of non-residential construction was estimated at $2.25 billion. The $740 million represents roughly one-third of that amount, yet incorporated only 7% of the total number of contracts. One can readliy ascertain the staggering affects of contract claims.1/

These figures compel the construction team to endeavor to resolve their differences as efficiently as possible or else face the realities of expensive, time-consuming formal disputes resolution proceedings. One may ask if claims are inevitable. Considering the complexity and ever-changing technology of the construction industry, coupled with today's apparent zeal for lawsuits, one would have to say claims are inevitable. This, however, is a defeatist attitude. More properly stated, claims are preventable, or at the very least they can be minimized. If the contract documents are carefully prepared to clearly define each party's resposibilities and address procedures to resolve disputes, the chances for claims can be significantly reduced.

CHAPTER TWO

THE CONTRACT

The Origin of Construction Disputes

The origin of construction contract disputes can be attributed to literally hundreds if not thousands of specific causes. Virtually all claims, however, can be traced by and large to five sources. First, someone failed to count the cost of the task at hand from the outset. Perhaps the owner did not comprehend the magnitude of the project cost and did not plan for contingencies, or, the designer's fee was not large enough for him to perform a thorough investigation and he decided to take short cuts. Perhaps the contractor underbid the job and is faced with having to recoup his potential losses, at all costs.

Another cause for claims is the changed condition. The soil borings which do not reflect an accurate picture of subsurface conditions is an example of this type of dispute. In recent years, with the poliferation of condominium construction, a third major source of disputes is consumer reaction. The shift in product liablity from the consumer to the manufacturer has heightened the awareness of the ultimate user, and since they are paying the bills, their dissatisfaction with the final product becomes a significant origin of disputes. The fourth cause of claims is the people involved. People plan, finance, design, build and, operate.

People with their diverse personality traits are tasked with working together in all aspects of the construction industry. These same people are determined to fulfill their reponsibilities by defending what they think is within their rights. Unfortunately, we often fail to swallow our pride merely to prove a point instead of making the most economical or feasible decision.

The fifth, and the major source of construction disputes, are errors, defects, or omissions in the contract documents. Either the designer failed in his preparation of the contract documents to accurately convey the work to be performed or the builder misinterpreted the intent of the documents.2/ The contract is the tool which is supposed to assign resposibility to the parties that have entered into the contract.3/ If this legal document, which includes the plans, specifications, general conditions, special provisions, etc., does not clearly define these responsibilities or the work to be accomplished, claims may result. Unfortunately, all too often the design agency relies on the "cut-and-paste" method of preparing the contract documents without thoroughly considering the peculiarities of each construction contract.

Before the contract is written, however, the type of contract to be awarded must be considered. This decision has a significant impact on how risk is allocated between the owner and contractor.

Risk Management

The construction business is notoriously risky. Literally billions of dollars are at stake annually when design professionals develop contract documents. Special care must be considered not only in the preparation of the plans and specifications, but also in selecting the appropriate contract "language". Regardless of the type of contract selected (fixed price, cost-reimbursable, etc.), the allocation of risk will be affected by the manner in which the contract is written.4/

The owner is risking that the project will not be built on time, as budgeted, and of the quality expected. Since the owner wants to ensure these risks are minimized, he seeks to control them through the preparation of the contract documents.5/ Typically, contracts are written to place the majority of the risk on the contractor, although the trend of late has revealed a shifting of risk from the contractor to the owner. Courts have held contractors cannot be responsible for every unknown as is often expected from reading the exculpatory language commonly found in contracts.

The contractor faces considerable risks. These include bad weather, inflation, labor problems, supply problems, accidents, and unforeseen conditions at the job site. The contractor faces the potential of losing a great deal of money, losing his reputation, and ultimately losing his

business. The contractor wants to protect his interests, but the owner dictates the allocation of risk with his contract.6/ In writing the contract, the owner's goal should be to allocate risk between he and the contractor to best suit the owner's needs, or, at the very least, understand the risks associated with the various types of construction contracts.

Contract Types

All construction contracts fall within a spectrum from a firm fixed-price, in which the contractor assumes practically all of the financial risks, to the cost-plus-fee arrangement, in which the owner accepts the financial risks. Within this this spectrum lies the construction management concept in which the owner assumes the risks associated with coordinating separate prime contractors. Selecting the type of contract depends on many factors. Depending on the needs of the owner (or limitations if the owner is in the public sector), the type of contract chosen will fall within this spectrum. If, for example, time is a consideration, the fixed-price contract is probably the least acceptable choice since the design must be completed before the project can be advertised for bids. A negotiated contract (e.g. cost-plus-percentage, cost-plus-fixed-fee, or construction management) would allow the owner to contract phases of the work as the design progresses.

The public sector historically has opted to use lump-sum and/or unit-price competitively bid contracts. This arrangement awards the contract to the lowest responsive, responsible bidder, which ordinarily the public views as the best deal for the taxpayers. The advantage of the fixed-price contract is the total cost of the construction project is known at time of bidding, before the work is started. This is also the simplest and most commonly issued contract used in the public and private sectors. The disadvantage is that since the contractor assumes most of the financial risk, he will likely include contingencies in his bid to cover any oversights or unforeseen risks. This type of contract results in more construction claims than any other contract because of the high risk to the contractor.7/

Cost-reimbursable contracts are used almost exclusively in the private sector. These contracts are normally negotiated between the owner and prospective contractor(s). Since the construction expenses will be covered by the owner the contractor's risk may be reduced considerably from the fixed price arrangement, depending upon how the fee was negotiated. However, the owner must be prepared to verify these expenses, which could become a monumental task on a large construction project. The likelihood of claims and delays is reduced since the owner is covering the cost as construction progresses.

No contract, however, is totally immune to claims. The owner should choose the type of contract which best suits his needs and allocate the risks by choosing the appropriate contract language.

CHAPTER THREE

CONSTRUCTIVE CHANGES

In only rare instances is a construction project of any magnitude completed without requiring at least one change to the original contract. Unfortunately, change orders usually mean additional expenditures. Ideally, we endeavor to minimize changes during construction by anticipating these contigencies during the design phase. No matter how careful we are in preparing the contract documents, though, changes are practically inevitable. Because these changes are anticipated, a changes clause must be included in the contract.

A unilateral changes clause affords the owner the flexibility to include additional work within the scope of the contract and allows him to correct any oversight in the original design, with of course an equitable adjustment and/or time extension if applicable for the contractor. Without a changes clause, the contractor would likely bid higher to minimize his risk against changed or unforeseen site conditions.

Formal Changes

Formal change order procedures have been well established in the public and private sectors yet

according to a recent survey of owners and engineers, the changes clause has proven to be the most troublesome. Changes clauses caused more disputes than any other single clause surveyed.8/ The contract documents must specify who has the authority to order changes in the work. In government contracts, if the person ordering the changes is not authorized to do so, the contractor cannot recover for performing the change. Changes are normally authorized only by the contracting officer for government contracts, which is specified in the contracts' general provisions.

Illustrative Case 3-1

C.D. Spangler Construction Company was under contract to construct housing units at Warner Robins Air Force Base in Georgia. His heating and air conditioning subcontractor provided submittals which evidence determined were haphazard and inconclusive. The contractor argued a meeting with the architect's representitive produced an approved change to the contract, knowing full well only the contracting officer had the authority to issue change orders. The board held that in light of the requirement for changes to be accomplished in writing by only authorized personnel, no change in the contract existed.9/

Although the contract may specify changes must be issued in writing, if the owner is aware the extra work is

being done without proper authorization, literal compliance may not be required.

Illustrative Case 3-2

Geigy Chemical Corporation contracted with Fanning & Doorley Construction Company to construct a system of underground piping at a plant in Rhode Island. Since the contractor had no experience in laying the chemical stoneware pipe, Geigy's resident engineer supervised the work. When the joints began leaking, the engineer directed the contractor to change the procedures specified in the contract. The contractor claimed for compensation for the additional work. The defendent argued since no change was authorized in writing by the Engineer, as stated in the contract, no addtional compensation was warranted. The court ruled that since the resident engineer was fully aware of the change and in fact directed it be done, the requirement for a written order was waived and, therefore, ruled in favor of the plaintiff.10/

Constructive Change

Constructive changes are caused by the owner's informal acts or omissions that change the contract requirements. Any oral or written act by the owner or his representative that requires the contractor to perform his

work in a manner not specified in the contract may cause a constructive change. If the constructive change causes the contractor to expend additional time and/or money, he may be entitled to an equitable adjustment.

The most common types of constructive changes include defective plans and specifications, changing the method of performance, interpretation, improper inspection and rejection, and impossibility or impracticality of performance.

Defective Plans and Specifications

If the owner-supplied plans and specifications are defective, the owner is considered to have breached the implied warranty that if the work is accomplished in accordance with the contract documents, it will meet the contract's performance requirements. This classical constructive change generally affords compensation for the contractor if increased costs or delays are incurred. These defects may manifest themselves as errors, omissions (e.g. a missing drawing detail), or ambiguities. If an ambiguity exists in the contract documents, then they are considered defective.

Illustrative Case 3-3

A general contractor submitted a claim for additional costs incurred from installing a fan during the construction of the new U.S. Mint. He claimed although

the fan was shown on the mechanical drawings, it was not shown on the electrical drawings he furnished to his electrical subcontractor. The government contended "the omission was so obvious that it should have been noticed at the bidding stage and that the appellant [contractor] should have sought clarification." The board ruled in favor of the contractor who should not have to bear the burden for the defective specifications. The board concluded that because the electrical installations were complex, the electrical subcontractor could not have been expected to cross-reference all of the mechanical drawings for every piece of equipment requiring electrical connections. This responsibility lies with the designer.11/

The contractor is obligated to seek clarification if he encounters an error, omission, or obvious conflict in the contract, which the government used as their defense in the previous illustration. If a contractor deliberately tries to profit from the owner's obvious oversight, his attempts to recover may be futile.

Illustrative Case 3-4

A painting contractor was contracted to sandblast a steel bridge to achieve the "appearance of cast aluminum" prior to painting. The inspector rejected the work. The contractor argued the "appearance of cast aluminum" was not the standard normally sought and that sandblasted

steel differs from an aluminum appearance. The Board of Contract Appeals ruled in favor of the government because the contractor was remiss in his duties for not pointing out the contract ambiguity.12/

Method of Performance

Contract drawings and specifications outline the work to be performed by the contractor. Unless a specific method is stated in the contract, the contractor has the right to choose the method of performance as long as it's safe and practical. If the owner directs the contractor to alter his construction procedures, he will be responsible for any additional compensation due the contractor if the owner's method was more expensive.

Illustrative Case 3-5

A government roofing contract specified the fire walls' bituminous flashings would be "returned and sealed or capped and sealed to the waterproof edges and ends." The roofing contractor chose to cap and seal the flashings, but the government directed they be redone using the return and seal method, which was more expensive. The court ruled the government had no right to direct the contractor to use the more expensive method and awarded the contractor the the difference between the two methods and the cost to redo the work.13/

The contractor also has the right to choose the sequence in which he performs the work provided it meets the contract requirements. Altering the contractor's work sequence may make the owner responsible for any additional costs associated with the change.

Interpretation

Once a construction contract is in force, the next step is to determine and follow what the contract says. This step is often times easier said than done. Often ambiguities and unenforceable exculpatory language in the contract creates the necessity for interpretation, by the owner or perhaps ultimately through litigation. If the owner's interpretation causes the contractor to incur additional expenses, the owner may be guilty of a constructive change. Certain basic laws govern contract interpretation with which owners and contractors should become familiar. First and foremost, courts do not rewrite contracts, they interpret and enforce them by descerning the intent of the parties upon entering into the agreement.

The courts have placed a great deal of weight on how the parties interpreted the contract before the dispute surfaced. "The interpretation given to a contract by the parties themselves while engaged in the performance of it

is one of the best indications of the true intent of the contract." (Case 3-6)14/ Courts interpret the contract as a whole, not by relying on a specific clause or drawing detail. Quite often both parties will hang their hat on a specific item in the contract rather than looking at the overall intent of the total written word.

The argument that the engineer's interpretation must control since he knew the intent when he wrote the specification does not hold water. A Court of Claims decision determined: "A government contractor cannot properly be required to exercise clairvoyance in determining its contractual responsibilties. The crucial question is 'what plaintiff would have understood as a reasonable construction contractor,' not what the drafter of the contract terms subjectively intended." (Case 3-7)15/ An important contract law principal is that ambiguitities within the document will invariably be interpreted against the drafter, provided the other party's interpretation is reasonable.

As mentioned previously, contracts are interpreted as a whole. Unless a priority of documents (i.e. plans, speficications, general conditions, etc.) is established in the contract, the courts will generally apply the rule that specific statements will have priority over general statements. Even if a priority is established, the effect is not automatic.16/

An owner is often tempted to include certain language in the contract which will protect him from a number of different problems which may arise during construction. Probably the most litigated exculpatory clause is the no-damage-for-delay clause which, theoretically, states the contractor cannot receive additional compensation if the project is delayed. These types of clauses are not only difficult to enforce, but will probably increase contractors' bid prices. Owners should carefully consider whether including exculpatory language in their contracts is to their benefit.17/

Improper Inspection and Rejection

The owner has every right to demand strict compliance with the contract. He or his representative may conduct periodic site inspections to ensure the contractor is performing the work in accordance with the contract. If the owner or his representative continuously changes the frequency of inspections or constantly nitpicks the contractor's work thereby requiring an ureasonably high standard of conformance, the owner may be guilty of a constructive change called "overinspection".

The owner's right to inspect does not imply he has a duty to inspect and, therefore, is not responsible for conducting tests and ensuring compliance, unless specified

as such in the contract.18/ If, however, obvious deficiencies are discovered and not identified by the owner, he may be responsible for the cost to correct the discrepencies.

Standard trade customs and practices often form the basis of acceptable performance. Rejection of the contractor's work which conforms to these widely accepted practices may result in a constructive change if he is directed to redo the work.

Illustrative Case 3-7

A contractor constructing concrete spillways for a U.S. Army Corps of Engineers' flood control project claimed the formwork tolerances demanded by the Corps were unreasonable. The U.S. Court of Claims interpreted the contract wording "forms shall be true to line and grade" to be based on acceptable trade practice and that expecting the contractor to comply with the specification literally was not the contract's intent. The contractor was entitled to recover the additional costs incurred by complying with the Corps' direction.19/

Rejection of an "or equal" substitution in a public contract is another constructive change. Private owners have every right to demand specific brand-name materials or equipment but, in order to foster competition, public contracts contain an "or equal" clause which, with few exceptions, eliminates proprietary specifications.

Impossibility or Impracticality of Performance

When it becomes impossible for the contractor to perform the work in accordance with the plans and specifications, he may be entitled to compensation for his effort to comply. If the contractor is expected to comply with a specification that is unreasonably difficult or expensive to perform, which exceeds the contract's intent, impracticality exists. For example, in a California case a contractor, while removing gravel from a parcel of land, encountered water. Because continuing the work would have cost ten times the original cost, the court held the economic impractibility was equivalent to impossibility and, therefore, ruled in favor of the contractor.(Case 3-8)20/

CHAPTER FOUR

ACCELERATION

Acceleration of a construction project occurs when the contractor is directed to complete the contract more rapidly than originally scheduled. Acceleration may be caused by, a) the owner directing the contractor to accomplish the work sooner than the contract completion date, or b) the owner directing the contractor to complete the project within the original contract duration parameters when, due to some change in the contract, excusable delay(s) were justified. These are forms of constructive acceleration; acceleration caused by the owner that he does not acknowledge. Overtime costs, loss of productivity, and increased overhead are examples of the impact felt by a contractor when he is forced to accelerate his work efforts. If the acceleration were necessary to compensate for his own unexcuseable delays or to simply finish the job early, the contractor would not be eligible to recover these increased costs. Or, if the contractor failed to complete the project by the contract completion date when no excuseable delay existed, he may be subject to liquidated damages.

Illustrative Case 4-1

A highway contractor fell behind schedule and was ordered

by the state to hire more people in order to complete the job on time. The contractor sued for breach of contract, claiming the state improperly accelerated the project. A lower court awarded the contractor $3 million in damages, but on appeal, the state argued they merely expected the contractor to complete the project on time. The appellate court reversed the lower court's decision by ruling the delays were caused by the contractor's ineptitude and that the state had every right to urge the contractor to finish the job by the contract completion date.21/

Directed Acceleration

When an owner directs the contractor to complete the project in less time than specified in the contract, he is subject to paying the contractor's cost of acceleration. When documentation clearly establishes the owner's directions to reduce the contract duration, one would think the contractor would thereby have an obvious audit trail to recover his increased expenses. The issue becomes complicated, though, in determining exactly what constitutes an order to accelerate.

A request by the owner to accelerate may be equivalent to the owner directing the contractor to accelerate. Threatening to default the contractor for not completing the contract by the original contract completion date when excuseable delays existed may

constitute constructive acceleration.22/ An owner's statement of urgency to have the project completed by the original completion date coupled with threats to issue unsatisfactory performance reports or threatening to assess liquidated damages may be construed as constructive acceleration (Case 4-2,3)23/ Courts have held this type of pressure applied by the owner constitutes a directive to accelerate.24/ The contractor, however, must be able to prove the owner committed an affirmative act to induce the acceleration.

Illustrative Case 4-4

A contractor agreed to construct a new office building for the United States government in 240 days but was delayed by strikes and work stoppages. The building, originally scheduled for completion in October, was not going to be finished until the end of March. When the striking workers returned to work, the government stressed to the contractor the urgency of completing the project by the end of December. The contractor accelerated his work and was able to give the government beneficial occupancy by mid-January. The contractor then submitted a claim for the additional costs associated with finishing the job early. The General Services Board of Contract Appeals stated that when a contractor is delayed for reasons beyond his control and is not granted an extension, the owner is guilty of constructive acceleration and is

obligated to compensate the contractor accordingly. But, given the absence of an affirmative act by the government to induce the contractor to accelerate, he was not entitled to collect the increased costs. The board did recognize the government granted the contractor a 160-day extension for the excusable delay, but the contractor elected to increase the pace to finish in 81 days without an affirmative act by the government directing him to do so.25/

One can readily see there exists a narrow interpretation as to what actually constitutes an affirmative act. Accurate, contemporaneous documentation becomes absolutely critical in the event of this type of dispute. Aside from documentation, probably the key to avoiding these situations is for the owner to accept the fact that acceleration may be necessary and he may have to pay for it. Writing threathening letters to the contractor simply builds a documented case for constructive acceleration. If the contractor is falling behind in his schedule, the owner has every right to advise him of his contractual obligations. The best approach for the owner to take is to send a neutral letter stating the facts and expressing his concern. This provides evidence for the owner showing the contractor was notified yet is written in a manner which cannot be considered a directive to accelerate.

Acceleration and Excuseable Delays

An excusable delay occurs when a contractor is delayed for reasons beyond his and the owner's control, or if the owner or his representative interferes with the contract creating a delay. Examples of the former are unusual weather conditions, labor disputes, and supplier delays while the latter may included a change to the contract affording the contractor more time to complete a modification to the contract. If excusable delays exist, but the owner still directs the contractor to meet the original contract completion date, the owner may be liable for the resulting damages incurred by the contractor. The owner may be guilty of constructive acceleration.

This form of acceleration is often resolved through some formal disputes process. Normally, this occurs when the owner fails to recognize an excusable delay exists, fails to grant the contractor an extension, and directs him to complete the project as originally scheduled. In order to meet the owner's deadline, he may, for example, be forced to hire more people, work overtime, alter his construction methods, or rent more equipment. If he can show excusable delays existed, no time extensions were granted, and he was forced to accelerate, the contractor should be able to recover for the additional expenses incurred. Claims can have a snowballing affect. It is

important the owner recognizes what constitutes an excusable delay and be prepared to either accept the delay or pay for the acceleration costs to have his project completed as originally scheduled.

CHAPTER FIVE

CHANGED CONDITIONS

Quite often during construction, a contractor will encounter a condition which was not reflected in the contract documents or was different than what he would normally expect to find for that particular location. Years ago, the contactor would have assumed the majority of the risk when encountering conditions which differed from the contract documents. Contract language was harsh placing the responsibility on the contractor to verify the site's conditions. Owners wrote unrealistic exculpatory language into their contracts relieving them of risk. Contractors became more sophisticated and started challenging these disclaimers in court. The results were a shifting of risk from the contractors to the owners when entering into a construction contract and a change in philosophy in writing changed conditions clauses. Owners are now typically accepting the risk of changed conditions and have written their contracts to reflect this transition, especially since the courts have generally ruled in the contractors' favor.

The terms "differing site conditions" and "changed conditions" are used interchangeably. They refer to situations in one of two basic categories. The first

category deals with situations during construction which are different from what is represented by the contract. The second category are conditions the contractor finds at the site which were unknown to the parties at contract award and differ materially from what would normally be expected for that project or location. Most contracts provide for an equitable adjustment when these situtations are encountered. Claims arise from differences in interpretation of the changed condition clauses and what the owner feels the contractor should have reasonably expected to find at the site.

Site Inspections

The contractor is expected to visit the site and to verify the conditions. Although he cannot be expected to anticipate all possible contingencies, recovery for changed conditions is unlikely if a reasonable examination would have revealed a variance. Thus, the conditions would neither be unforeseen or unusual.

Illustrative Case 5-1

A government contractor was denied a claim that he was expected to excavate more rock than he anticipated because he failed to properly estimate the extent of the work by not conducting an adequate site investigation. The contract called for burying 50 miles of cable. The amount or type of rock to be encountered was not specified in the

contract and was left to the contractor to determine the site's conditions. Prior to contract award, the contractor inspected 20 to 25 miles of the project using a probe, neglecting the remaining portion because of its rough terrain. The contractor bid the job based on an estimated 10 percent rock excavation. After discovering he underestimated the amount of rock, he filed a claim for the increased costs. The government's position revealed a bidder's conference was held which the claimant failed to attend. The government provided four-wheel-drive vehicles for the bidders to observe the site, which clearly revealed the presence of rock throughout the area. The Armed Services Board of Contract Appeals ruled that since the contract documents were silent in assessing subsurface conditions, and that a reasonable site investigation would have revealed the prevelence of rock, the contractor's claim was denied.26/

A visual or subsurface inspection of the site may not adequately assess the site's conditions. A contractor is expected to familiarize himself with other conditions affecting the project including, for example, the weather.

Illustrative Case 5-2

A contractor claimed he encountered a changed condition because he had to build a haul road over a previously dry lake bed. Upon initial inspection of the designated haul road, he discovered a portion crossed a dry lake bed.

After award, it rained and a quarter-mile of the haul road was under water. The contractor sought compensation for 35,000 tons of fill required to reconstruct the road. The Agricultural Board of Contract Appeals denied the claim stating the weather conditions were not unusual and that the ground conditions during construction were similar to those found when the site was made available prior to bid opening.27/

For the contractor to recover under the changed conditions clause, conditions found at the job site must be different than described in the contract documents, could not reasonably be ascertained by a site inspection, or considered unusual by experienced contractors working in that area. If the conditions are not considered unusual for a particular location, chances for recovery are minimal.

Illustrative Case 5-3

A contractor working in McKinley National Park in Alaska claimed he was due additional compensation for excavating in permafrost, which was not indicated on the contract drawings. The changed conditions claim was dismissed because permafrost is prevelent throughout Alaska and, therefore, not considered unusual for that location.28/

Exculpatory Clauses

In an attempt to limit their risk given a changed

condition, owners include certain exculpatory language. By tasking the contractor with conducting a thorough site investigation, verifying dimensions in the field, and providing his own soil borings, the owner minimizes his liability. The courts have not always looked favorably upon these types of disclaimers, yet they have taken into consideration their intent and applicability for specific contracts.

The issue is normally whether the owner supplied information in the contract which the contractor was to rely upon or whether the contract specifically tasked the contractor with conducting his own investigation. A contractor was denied additional compensation for his excavation subcontractor who removed a significant amount of rock not originally anticipated. The test boring data available to the bidders was for information only and was not a part of the contract. Also, upon obtaining the data, the contractor released the owner of any reliability associated with the soil borings accuracy.(Case 5-4)[23] The contract documents for an underwater bridge job contained site data which represented conditions which could be expected to be encountered. A contract provision stipulated this data was for information only, did not necessarily reflect exact conditions, and thereby did not relieve the bidders from verifying actual conditions. After contract award, the contractor encountered

conditions which varied considerably from those represented by the owner. The court disregarded the exculpatory language stating the owner-provided site information was a positive representation of the conditions and that the contractor could not have reasonbly verified the variances.(Case 5-5)30/

The effectiveness of disclaimers depends upon the specific claim and how the contract is written in terms of the data represented by the owner. If the owner had years to gather data (e.g. soil boring data for a large land development project) and expected bidders to not rely on his data, but obtain their own in the few weeks they have to submit their bids, the courts would probably not be too sympathetic toward the owner. However, if the contract clearly tasked the contractors to verify data or obtain their own information to bid the job, and doing sc was considered reasonable, the exculpatory language was effectively employed. Owners should be aware, though, using exculpatory language to transfer risk almost guarantees higher bid prices. Interestingly, a recent study concluded the incident of changed conditions claims was independent of contract language.31/ The key to inserting disclaimers is reasonableness and realizing there is no free lunch. That is, owners can either expect

to pay for detailed investigations (directly or indirectly) or be prepared to compensate contractors for differing site condition claims.

Notification Requirements

Changed conditions clauses normally include the necessity for the contractor to notify the owner, architect, or both upon encountering a latent or differing site condition within a specified period of time. If the contractor encounters a condition not represented by the contract documents and proceeds with the work without advising the owner of his discovery, he may have waived his right to claim for recovering under the changed conditions clause. The owner must be given the opportunity to verify a changed condition exists.

Illustrative Case 5-6

Coleman Electric Company claimed additional compensation for excavating 7500 cubic yards more than the amount specified in the contract. The contractor waited until the work was finished before notifying the government in order to ascertain the accurate quantity of additional work. Because the government was not afforded the opportunity to verify the undisturbed conditions beforehand, the claim was denied.32/

A contractor may, in certain instances, be able to

collect under the changed conditions clause for additional compensation without formal, timely notification provided the owner or architect is aware of the situation, has been directed to proceed, and documented accordingly. Here is another case where accurate, contemporaneous documentation is paramount. When in doubt, send the other party a letter for the record.

CHAPTER SIX

SCHEDULE CHANGE

Throughout the course of a construction project, the owner or contractor may find it necessary to suspend the work in progress for either the owner's benefit or reasons beyond the parties' control. Whether the contractor may recover costs associated with a suspension depends on whether a suspension of work clause is written in the contract and the magnitude of the suspension. Terminating a contract is a drastic measure and should only be considered after all other contract negotiation avenues have been exhausted. At times, though, this may be the only alternative. Because of the detrimental ramifications a termination can have on a contractor's reputation, an owner must be prepared to fully support his decision since litigation would practically be inevitable.

Suspensions

Suspension of work occurs when the owner causes the contractor to suspend his work, either expressly or constructively. Generally more often found in government contracts than in the private sector, suspension of work clauses allow the contracting officer to suspend work for a reasonable period of time without paying the contractor

damages for delay, and expressly permits the contractor to collect for expenses caused by an unreasonable delay. The suspension of work clause provides for a means of compensating the contractor for an unreasonable delay which may otherwise be considered a breach of contract in the absence of this clause. Suspension for a reasonable period would be accompanied by an appropriate time extension.

If the contracting officer, or owner in the private sector, does not issue a suspension of work order, yet delays or suspends the work for some reason, they may be guilty of a constructive or de facto suspension. These delays may be an owner's failure to act within a reasonable period, which permits the contractor to collect under the suspension of work clause.

Illustrative Case 6-1

Upon appeal to the U.S. Court of Claims, a government contractor was considered constructively suspended because the work site was not properly made available, even though extensions and contract modifications were initiated. The contract called for constructing a system of locks and a dam on the Ohio River. The government contracted with the state to relocate a highway prior to construction, which was not completed when the contractor started work, forcing him to alter his schedule and work methods. Because the work site and roadway was not made available

to the contractor, the government failed to fulfill its warranty. Failure to not issue a suspension of work order did not preclude the contractor from collecting damages under the suspension of work clause because the court considered the suspension a constructive suspension. The appeal was remanded to the Corps of Engineers Board of Contract Appeals to determine damages due the contactor.33/

Other examples of constructive suspensions are an owner's delay in providing information, delay in providing owner furnished equipment or materials, delay in issuing change orders, delays by separate prime contractors, and improper notice to proceed.34/

What constitutes an unreasonable delay is often the subject of litigation. Equally important to the amount of time the suspension occurs are the circumstances causing the delay. For example, where a five-day suspension may be considered reasonable for one circumstance, five days for an owner's decision may seem unreasonable.

Illustrative Case 6-2

The Air Force contracted with Liburn Construction Company to construct drainage ditches adjacent to runways on an Air Force base. The contract specified the runways would be active and detailed the provisions the crews would follow to avoid the hazardous conditions. The Board of Contract Appeals considered a one-day delay of work

unreasonable within the suspension of work clause since the contractor could not access the work area because a plane was on the adjacent runway. The contractor was awarded $1000 in damages.35/

Illustrative Case 6-3

A government painting contractor working on an Air Force base was suspended until the contracting officer could make a decision on whether certain garages should be painted, which took eight days. The contractor claimed compensation for the delay which the contracting officer rejected because no formal stop work order was given. Upon appeal, the Armed Services Board of Contract Appeals ruled eight days was an unreasonable amount of time to reach a decision and that one day seemed adequate. The board remanded the matter to the parties to negotiate a settlement.36/

As evidenced above, the concept of reasonableness is subjective and dependent upon the circumstances affecting the delay. If a delay is caused by defective specifications, the suspension is automatically considered constructive.

Illustrative Case 6-4

A government contractor was delayed after uncovering a gas line which was at a much higher elevation than indicated on the contract drawings. He claimed he was due delay costs from waiting for the government to move the gas

line. The Corps of Engineers Board of Contract Appeals ruled "any delay to a contractor as a result of defective specifications is a suspension of work for an unreasonable period of time" and that the delay costs were compensable.37/

As some delay may be considered reasonable, a Board may apportion the delay period. The first 30 days after a contractor notified the owner to remove existing utilities was deemed a reasonable delay since owner removal was specified in the contract and performed at no cost to the contractor. The 45 day delay which followed, though, was considered unreasonable.(Case 6-5)38/

An owner's suspension of work due to lack of funds to make progress payments is considered a show of bad faith and may constitue a breach of contract.(Case 6-6)39/ Suspension of work without timely notice to proceed upon completion of the suspended period may also be considered a breach of contract.40/

Not all contracts contain suspension of work clauses. Including this provision manages the owner's risk. If a reasonable suspension is caused by the owner, the contractor can recover by change order. If the delay is unreasonable, the contractor can collect for damages as a result of the suspension of work clause. In the absence of this provision, if a delay were encountered, reasonable

or not, the contractor's only recourse would be the disputes clause.

Termination

The right to terminate a contract may originate from either general principles of contract law or the expressed conditions of the contract. Termination may be for the convenience of the owner or due to a breach of contract, where one of the parties, generally speaking the contractor, failed to meet the obligations set forth in the contract. Termination for breach of contract, or default, is a drastic measure which often leads to litigation, whereas termination for convenience generally follows an expressed contract provision which gives the owner flexibility and guarantees the contractor payment and profit for work completed.

Termination for Convenience

A termination for convenience clause is a right which is generally reserved for federal contracts in order to provide the government the latitude it needs, given the number of national and international events which could affect contract continuance or interruption. The need for a unilateral right to terminate a contract was first issued by the Supreme Court in 1875 when the Secretary of

the Navy suspended a contract and settled with the contractor for work partially completed: "The power to suspend work contracted for, whether in the construction, armament, or equipment of vessels of war, when any cause the public interest requires such suspension, must necessarily rest with him. . . It would be a serious detriment to the public service if the power of the head of the Navy Department did not extend to providing for all such possisble contingencies by modification or suspension of contracts."(Case 6-7)41/ Because of these necessities, termination for convenience clauses are incorporated in all federal contracts. A key phrase in the clause stipulates the contracting officer may terminate when such termination is in the best interest of the government.42/ A number of reasons may exist which are considered within the government's best interest.

Illustrative Case 6-8

The federal government solicited bids for a sewer and roadwork project in 1968. After the bid opening, the apparent low bidder was first advised he would be awarded the contract. Shortly thereafter, he was told, due to a combination of circumstances, the government would have to reject all bids and postpone the project until the next fiscal year. The contractor filed suit for anticipatory profits he was denied by the contract's cancellation. The court ruled that under the termination for convenience

clause, the contractor could not claim anticipated unearned profits whether or not a legal contract was consummated.43/

The only time the federal government's termination for convenience clause could be reasonably challenged is if the termination is done in bad faith or with a clear abuse of discretion. In these cases, the burden of proof is on the plaintiff and, as one would imagine, is difficult to sustain.44/

Although the termination for convenience clause is often identified with federal contracts, this clause is used in other public sector and some private sector construction contracting. The termination for convenience clause used by the federal government is probably the most equitable because it assures the contractor payment for all work completed and applicable expenses incurred. This includes work in place and materials purchased and suitably stored on site or at an approved location. Contractors are advised to be aware of the contract language associated with this clause when contracting with other public and private agencies. This clause may be more restrictive placing greater risk on the contractor. If the contractor is entitled to receive payment for only work in place, costs incurred for materials previously purchased and suitably stored are probably not recoverable. The contractor should attempt to have the

clause altered, if possible, to permit payment and profit for all work completed, including material purchased and suitably stored on site or at an agreed location off site. Contractors are further recommended to include a termination for convenience clause in their subcontracts to afford them the same flexibility the owners have.

Termination for Default

As mentioned previously, terminating the contract for default is a drastic measure in construction contracting. This should be, without question, the absolute last resort in attempting to accomplish the project. Defaulting a contractor should only occur after all other means of negotiation have been exhausted. Regardless of the outcome, neither party wins if a contract is terminated for default. The owner must find a means to finish his project and the contractor, unless completely exonerated, risks losing his reputation. The only way the contractor can totally recover if he is wrongfully defaulted is through litigation, which of course may take years. In the meantime, he may go bankrupt. Both parties should avoid termination for default at all costs.

The owner should carefully weigh all factors before electing for termination considering the difficulty, time, and costs associated with securing another contractor to finish the work. Because termination completely severs

the parties' contractural relationship, the cause for terminating the contractor must be based on some breach of a material feature of the contract and only when economic factors dictate the decision. Normally, the owner can never recover the additional costs associated with securing a second contractor, much less have his project completed on time. The owner is generally much better off working with the present contractor, enforcing the contract language to his benefit, and limping through to completion.

For those cases when termination for default is totally unavoidable, the owner must have an exceptionally good reason. In fact, the reason must affect a material feature, expressed or implied, which forms a fundamental part of the contract. Legitimate reasons for termination for default include the contractor's filing bankruptcy proceedings, assignment for benefit of creditors, failure to pay subcontractors or material suppliers, breach of contract, failure to progress the work properly, or failure to complete on time. Even though the owner may have a provision in the contract giving him expressed authority to default the contractor for any of these reasons, substantial proof is necessary to support his decision. Considering the detrimental affects the contractor would suffer from termination, the owner's case must be foolproof.

Defaulting a contractor may be based on the owner's contractural right to do so. However, just because a contract provision provides the owner an expressed right, the clause may not be enforceable. The basis for default termination must be supported by substantial evidence weighing heavily in the owner's favor since both parties are faced with such significant liability.

Illustrative Case 6-8

A government contractor was terminated for default for failing to perform the work diligently. The contract was completed by another contractor on a cost-plus basis. The U.S. Court of Claims held the government responsible for breach of contract because the contractor was not granted an excusable delay, to which he was entitled and was, thereby, improperly terminated. The court ruled the contractor was entitled to "completion costs in excess of those plaintiff reasonably would have incurred had there been no termination" and recovered lost rental income deprived the contractor after the government confiscated his equipment.45/

Simply because the contractor failed to satisfy the contract to the letter doesn't automatically give the owner carte blanche authority to terminate for default.

The owner has every right to insist on strict conformance with the contract specifications. Failure to

meet these requirements may be grounds for default termination. Specification compliance is often subject to interpretation, though, and must be carefully considered before resulting to termination. Another reason for defaulting the contractor is if he fails to produce the required payment and performance bonds prior to starting work.

A contractor's failure to make suitable progress in the work is grounds for default, provided the contract contains a "time is of the essence" clause. This clause establishes the urgency of completing the contract by the prescribed contract completion date, and does not necessarily have to be expressly stated.

Illustrative Case 6-9

The Engineer's Board of Contract Appeals ruled that a contractor's termination for delays was appropriate although no provision existed stating time was of the essence. The Board stated: "Aside from the financial aspects of the case as it may affect the government, we cannot ignore the government's interest in discharging its governmental functions. As is well known, Congress has charged the Corps of Engineers with considerable responsibility for the management of the country's interstate waterways. To the extent that appellant's delays interfered with the government's discharge of its responsibility in properly managing that function, it

'damaged' the government despite the fact that the government may not have suffered monetary damage by the delays. . ."46/

Just what constitutes suitable progress depends upon many factors, but, generally speaking, if the contractor's performance is such that timely completion is in jeopardy, termination is justified. If he is a few days behind schedule on a project with six months remaining on the contract, these are hardly grounds for default. Even if the contractor is behind schedule, if he can prove by accelerating his work effort he can complete the job on time, termination would not be appropriate.

Determining the degree to which the contractor is behind schedule depends upon the schedule itself and whether or not the schedule is a contract requirement. If the schedule (CPM, bar chart, line of balance, etc.) is merely a guide for the contractor to follow, the owner may not have the wherewithal to produce evidence of untimely progress, unless he calls in a consultant to recreate the chain of events. If the schedule is not a contract requirement, the owner certainly cannot default the contractor for not following his own schedule. If, however, the schedule is required, and periodic updating is specified, the owner has a significant basis for determining how the contractor is progressing. Most standard contract language fails to specify the

requirements for a detailed performance schedule, like a CPM. Although not all projects justify a sophisticated approach to scheduling, contracts of any reasonable scope should incorporate the use of a CPM or similar technique.

Relating quite closely to termination for failure to progress satisfactorily is failure to complete on time. Again, this depends upon whether time is of the essence and, therfore, is a material part of the contract. If the contractor has substantially completed the work by the contract completion date, termination should not be considered. If, however, the contractor has a considerable amount of work remaining, the courts have generally held in the owner's favor. More than likely, though, the owner would have initiated default termination prior to the contract completion date if the contractor were not progressing satisfactorily and finishing on time seemed highly unlikely.

The owner must be careful when terminating for delays. If the owner waits until after the contract completion date to terminate for delays, the contractor may claim he was lulled into believing the delays were obviously excusable and that he would not be terminated for the delays. Also, if delays resulted from the owner's acts (e.g. delay in providing owner-furnished materials, confusion over the contract documents, or failure to make progress payments), or the delays were considered

concurrent (i.e. both parties contributed to the delay), terminating the contractor for default without carefully assessing the circumstances could be a serious mistake.47/

If the owner does terminate the contract, the contractor may be assessed liquidated damages until the second contractor called in to complete the work has reached substantial completion. The owner must, however, act within a reasonable period of time to secure the second contractor's services or risk losing at least a portion of the liquidated damages.48/

Recovery for Termination

For a breach by the contractor, the owner may recover the associated damages. Two theories of recovery are used by the courts in assessing the damages due the owner: 1) the result of cost rule, and 2) the diminution in value rule. Courts using the result of cost rule entitle the owner to deduct from the contractor the amount it would cost the owner to properly complete the work. Other courts using the dimunition in value rule hold the proper assessment is the difference between the value of the project completed to date by the contractor (prior to termination or abandonment) and the value of the completed project. In general, when there has been substantial performance, the cost rule is applied. The dimunition in value rule is applied when it would be unjust to retain

the contractor without paying him when correcting the defects would be impractical.49/

Illustrative Cases

Case 6-10. A contractor built a house for a woman who refused to make final payment because some rooms were of smaller dimension than shown on the plans. The contractor filed suit for the balance due. The court applied the dimunition in value rule to resolve the complaint. Because the contractor substantially complied with the contract, the house as constructed suited the intended purpose, and the owner received the benefits of the contractor's work, the contractor recovered the difference in the contract price and the damages. (Fictitious Case).

Case 6-11. A contractor agreed to build two porches, raise the garage, and build a cement floor at the owner's home. Because the garage floor sloped, the owner refused to pay the contractor the balance due. The court applied the result of cost rule to reduce the contractor's claim for the cost of correcting the problem. (Fictitious Case).50/

CHAPTER SEVEN

DELAYS

When an owner hires a construction contractor, he has two primary goals; 1) to provide the type of quality product for which the owner has budgeted, and 2) to have the project completed on time. If the contractor can provide these two key elements in accomplishing the work, the owner would be more than satisfied. A construction project of any magnitude, though, is very complex often making it very difficult to achieve a quality product on time. So many factors affect the construction process, some controlable, others not, that to naively assume the owner will get exactly what he wants when he wants it with little difficulty can become an expensive proposition.

The owner or his representative must take great care to ensure the two primary goals are satisfied. Producing a quality product can be attributed to some form of quality management program incorporating the concepts of quality control and quality assurance. Producing the project on time is partially the result of diligent efforts by all members of the construction team and plain luck because, some delays are avoidable, others are not.

What is a delay? In terms of construction claims, a delay is the time in which some portion of the work has

been extended or not performed due to some previously unexpected circumstance. A delay may originate from one of many different sources including the owner's actions, the contractor's scheduling, the Architect's design, or an act of God. Whatever the origin, delays not only extend the project's completion date, but also in many instances produce increased costs for one of the contracted parties.

Delayed construction projects may be the exception, but they're certainly not uncommon. Owners and their design professionals endeavor to minimize the contractor's potential for delays by incorporating provisions in the contract encouraging him to complete on time or face certain consequences. These include liquidated damages, which are the approximate costs the owner must expend as a result of the work not being completed as originally scheduled, and no damages for delay clauses, which have often proved unenforceable.

No damage for delay clauses theoretically protect the owner from owner-caused delay claims. For example, if a contractor were delayed due to late delivery of owner-furnished materials, under the no damage for delay provision, the contractor could not recover any of the associated delay costs. This provision is unrealistic and flies in the face of many other legal concepts, particularly breach of contract. However, when both

parties can reasonably anticipate a delay at time of award, the no damage for delay clause may be upheld.

Illustrative Case 7-1

Carabine Construction Co. contracted with Chrysler Realty Corp. for the construction of a new automobile dealership in Akron, Ohio. A seven month delay occurred until a city zoning ordinance was passed which would then allow the contractor to obtain a building permit. The contractor sued to recover delay costs. The trial court ruled in favor of Chrysler, which the appelate reversed. On appeal, the plaintiff argued the no damage for delay clause was not applicable since the damages for the delay were not within either parties' contemplation at time of award. The Supreme Court of Ohio reinstated the trial court's decision because the contract specifically placed the burden on the contractor to comply with local ordinances and to determine the time required to process the building permit.51/

Just how effective the no damage for delay clause is depends on the contract language and the circumstances creating the delay. For the most part, this type of exculpatory language should be carefully scrutinized before including it in a contract because of its questionable enforceability and the probability of inflated bids to cover contingencies.

Categories of Delay

An owner has every contractual right to expect his work to be accomplished on time. If the contractor fails to fulfill his obligation due to his own scheduling ineptitude, he must be prepared to face the consequences by accelerating his work effort or paying liquidated damages. By the same token, if a delay occurs, through no fault of the contractor, he should not be expected to absorb these costs (excluding the notion of no damage for delay provisions). If a delay resulted from the actions or inactions of both parties, the associated delay damages should be shared, while if neither party was at fault, the contractor should receive consideration by means of an extension.

Excusable and Inexcusable Delays

If a contractor is delayed in the performance of his work due to owner directed changes, unusual weather conditions, labor strikes, or neglect by the owner or his representative, the contractor may be entitled to an extension of time. Owner caused delays are excusable and compensable, i.e. the contractor is due consideration for the resulting increased expenses he incurs from the delays. Delays such as extreme weather conditions, supplier or labor strikes, or other outside influences

beyond the control of either party are normally excusable but not compensable.

Three factors are important in evaluating whether an event constitutes an excusable delay. These factors include whether the event: 1) was foreseeable by the contractor, 2) was beyond the contractor's control, and 3) occurred without the fault of the contractor or his subcontractors. A "foreseeable" event is one which the contractor, based on his experience in the construction industry and armed with the knowledge of current events affecting his line of work, could reasonably anticipate. A Court of Claims ruling determined a contractor could not be expected to have "prophetic insight and take extraordinary preventive action which is simply not reasonable to ask of the normal contractor".(Case 7-2)52/ Events are not considered beyond the contractor's control if, 1) the event could have been prevented, or 2) performance was possible despite the occurrance of the event.53/ Delays resulting from a contractor's action or failure to act represent "fault or negligence". Many delays are considered inexcusable because the contractor neglected to act upon a situation within his control. In one case, because a contractor could not obtain a certain anthracite coal, he claimed an excusable delay. The court determined he assumed the responsibility of obtaining the specified coal when he entered the contract and, that

since he could not prove impossibility of performance, the delay was ruled inexcusable.(Case 7-3)54/

Acts of God are considered excusable delays and defined as an extremely rare occurrance of nature encompassing such acts as fire, floods, earthquakes, and tornadoes. Unusually severe weather conditions, although considered an excusable delay, are differentiated from acts of God because the latter's occurrance is much less likely. Unusually severe weather conditions are determined based upon comparison with official weather records for such climatic conditions as rainfall, wind, and temperature. The dividing line between an excusable and an inexcusable delay is whether the unusually severe weather conditions could have been reasonably anticipated and if the conditions actually had a detrimental affect on the contractor's work.

Illustrative Case 7-4

A contractor claimed he was entitled to an extension because of unusually severe weather. The General Services Board of Contract Appeals denied the claim stating evidence showing rainfall, wind, or snowfall exceeding the average for a given day was not sufficient evidence for supporting an excusable delay. The board stated "unusually severe weather means adverse weather, which at the time of year in which it occurred is unusual for the place in which it occurred".55/

Labor disputes, supplier strikes, and other consequences of labor unrest which affect the contract's progress are considered excusable. Delays resulting from the contractor's employees or subcontractor's employees labor strikes are excusable. Delays resulting from a contractor's unfair labor practices may not be excusable since the delay would be considered avoidable, whereas strikes against a subcontractor for unfair labor practices may be considered excusable.56/ Other excusable delays may result from epidemics, vandalism, sabotage, unusual delay in transportation, or any cause which was unforeseeable and beyond the contractor's control.57/

A delay in a project which is within the contractor's control to prevent from occurring is considered an inexcusable delay. In this case, the contractor failed to take appropriate action to avoid the delay. A contractor is not entitled to an extension for an inexcusable delay. Therefore, he must either accelerate his work force to complete the project on time, or face the consequences of paying liquidated damages or possible lawsuit for breach of contract.

Determining whether or not an inexcusable delay occurs is often difficult for the owner to ascertain during construction unless he or his representative is closely monitoring the contractor's schedule. Without the benefit of knowing when a critical path activity has been

delayed, the owner has no way of advising the contractor of his obligation of maintaining sufficient progress nor can the owner determine what exactly caused the delay. The contractor, on the other hand, would have no trouble establishing what activity(s) were delayed due to the owner's negligence. Common sense dictates the owner should establish some means of monitoring the contractor's schedule on at least a weekly basis. Although it is possible to recreate the schedule of events after the contract is completed, the process is time consuming, often expensive, and may require litigation to prove the point.

Types of inexcusable delays are numerous. These may include failure by the contractor to properly manage his work force, procure materials in a timely manner, or provide adequate equipment, removal and replacement of nonconforming work, failure to anticipate weather conditions affecting the work, and lack of proper supervision, to name just a few. Practically any delay which was foreseeable and within the contractor's control is considered inexcuseable. Inexcusable delays will be discussed in further detail later in this chapter under contractor-caused delays.

Compensable and Noncompensable Delays

Excusable delays are categorized as either

compensable or noncompensable. If a delay is compensable, the contractor is entitled to additional costs incurred from the delay as well as an extension of contract performance. A noncompensable delay entitles the contractor to a time extension, but no additional funding.

The basis for determining whether a delay is compensable arises from the terms of the contract. Probably the most common compensable delay results from a change to the contract, which is covered by standard change order clauses providing for equitable adjustments. Changed condition clauses normally afford the contractor an extension and additional compensation if applicable. These types of delays are considered within the owner's or design professional's control.

The recoverable costs created by a delay may include not only direct material, labor, and equipment costs, but also extended home office and job overhead costs, material and wage escalations, and inefficiency attributed to the delay.

Concurrent Delay

Concurrent delays occur when two or more independent delays occur simultaneously. The delays may be any combination of excusable, inexcusable, compensable, noncompensable, contractor-caused, owner-caused, etc. An example of a concurrent delay could be owner-furnished

materials were not provided as scheduled but, the contractor's employees were on strike during the same period precluding installation if the materials were available. Sorting out the affects of the individual delays can be rather cumbersome, especially if a critical path network schedule was not used throughout the construction process. Courts determine legal impact based on the parties responsible for the delays, the length of the individual delays and how they impact the schedule, and whether the parties are seeking damages or an extension of performance time.58/

Some courts have ruled if concurrent delays are attributable to both parties, neither party may collect damages. Courts endeavor to apportion concurrent delay costs but, the affect of insufficient documentation and scheduling procedures may make this task impossible, in which case neither party may recover. The trier of fact must prove apportionment to recover. For example, the owner must prove the contractor's delay had more impact on the concurrent delay than the owner's to recover, and vice versa. Determining liability is the key to apportionment, which can realistically only be accomplished through a detailed, post-construction analysis of the schedule.59/ This is just another example of the necessity of an effective critical path schedule for practically every construction project.

Causes of Delay

There are many reasons for a construction project to be delayed. In general, the cause of project delays can be attributed to someone not recognizing in advance the potential for the occurrence of certain circumstances. Failure to properly assess or manage the problem at hand in a timely manner is the underlying reason for practically every delay. Of course, as previously discussed, a delay may occur through no fault of the owner, contractor, or design professional.

Any member of the construction team may cause a delay, either intentional or not. A party may be responsible for a delay due to some action on their part, or failure to react to a given situation. Sorting out the responsible party for delays is not always as clear as one may suspect. Contract interpretation is often necessary to establish responsibility for delays.

Owner-Caused Delay

The owner must fulfill certain contractual responsibilities in order for the contractor to best manage his construction operation. If the owner fails to perform his contractual obligations in such a mannner as to delay the contractor in the process, he can be expected to offer a time extension and, perhaps, additional money.

The owner, through a contractual obligation, must provide the contractor the project site. Problems arise when the owner fails to obtain rights of way (e.g. a highway project) or physical access to the site (e.g. failure to demolish existing structures, provide an access road, or relocate existing utilities).

Illustrative Case 7-5

A New Jersey State highway contractor claimed he was delayed because the state failed to obtain appropriate right of way access. The state denied his claim for delay damages due to a clause in the contract indemnifying the state from any damages resulting from right of way delays, even though they orally confirmed access was available during a preconstruction conference. The court concluded if the contractor were informed from the outset that right of way access was not available, the clause would become operative. Since a valid right of way was not obtained by the state, as was their contractual obligation, they could not be "immune from liability".60/

Typical construction projects also require the owner to obtain approval and pay for various approvals, easements, inspections, and licenses. Delays attributed to the owner's failure to perform these obligations may create an excusable delay. The owner must fulfill his financial obligations by proving his ability to fund the project and by making timely progress payments. Delays

resulting from a failure to fulfill these responsibilities may also constitute an excusable delay.

Under the typical construction project scenario, the design professional has no contractual relationship with the contractor, only with the owner. Therefore, the owner is contractually obligated to provide an adequate set of drawings and specifications for the contractor to perform the work. Defective drawings and specifications causing delays would be considered a breach of contract affording the contractor recovery for the resulting damages. The owner is also responsible for delays resulting from other acts or omissions by the design professional. These delays will be discussed in more detail under designer-caused delays.

In his capacity as contract administrator, the owner must perform his duties in a timely manner to prevent delays in the construction process. These responsibilities may include providing surveys, coordination of separate prime contractors, making timely progress payments, providing owner furnished materials or on-site utilities, or failure to issue a timely notice to proceed.

Illustrative Case 7-6

A government contractor performing work on a New Jersey post office was required to follow a contractually specified work sequence which would permit continuous

postal service. The contractor was forced to alter his work schedule as originally specified due to an error in the government provided site survey. The new survey was not completed until seven weeks after the error was discovered. Completion was delayed for 80 days beyond the original contract completion date. The contractor sued for breach of contract for the disruption of his work schedule and the associated loss of inefficiency. The court ruled the government failed to fulfill its obligations and awarded the contractor the breach of contract damages.61/

Illustrative Case 7-7

An electrical contractor contracted with the Washington Metropolitan Area Transit Authority to begin work within 10 days of notice to proceed. Upon issuance of the notice, the contractor discovered the site contractor was not finished with his demolition work which prohibited the electrical contractor access to the site. The contractor submitted a notice of his intentions to claim for delay damages, which the contracting officer rejected. The CO contended the site contractor prohibited site access not the CO. The Federal Engineering Board of Appeals stated a notice to proceed was comparable to an order to start work, which also implied site availability. The owner, the board concluded, was liable for providing the work site "whether or not it was negligent in meeting its

obligation".62/

Changes in the contract, whether bilateral, unilateral, or constructive, are often accompanied by a delay. Most contracts have change clauses which provide for an equitable adjustment of time and money if a change is required within the contract scope. Not all changes create a delay. The contractor must prove the change created the delay. Delays due to changes may be compounded if the owner fails to issue the change orders in a timely or orderly fashion.

Illustrative Case 7-8

A government contractor who contracted to perform marine construction work encountered defective conditions after starting work. After the contractor formally requested a change order and notified the contracting officer his work schedule was disrupted as a result of the problems encountered, he was notified the change orders would be delayed pending funds availibility. A month later, the contractor was directed to perform the corrective work, but was denied a request for expenses due to the delay in issuing the change order. The Armed Services Board of Contract Appeals held the contractor was entitled to suspension damages due to the delay.63/

The owner has a contractual obligation to not interfere with the contractor in the management of his work effort. Any action by the owner to disrupt the

contractor's progress resulting in a delay may constitute a compensable delay. The owner's mismanagement of separate prime contractors which causes a delay may also create a compensable delay. The owner may attempt to relieve his liability by incorporating coordination and cooperation clauses in the contract.64/

Designer-Caused Delay

As mentioned previously, under the traditional owner-contractor relationship, the design professional acts as a third party with no direct contractual relationship to the contractor. Typically, the owner secures the design professional to design the project, produce the contract and bidding documents, and perform periodic site visits to ensure the contractor is conforming with the contract provisions. The designer is ordinarily not tasked with inspection and quality control responsibilities; normally the contractor or an outside agency will perform these duties. The designer will typically issue change orders, and certify progress payments, substantial completion, and final payment. Any act or inaction by the design professional which may delay the contractor's progress may result in a compensable delay, and since no contractual relationship exists between the designer and contractor, the owner must bear the brunt of the delay damages. However, the owner may

recover the resulting damages from the designer if he can prove breach of contract with respect to the designer's responsibility to exercise reasonable care and skill in preparing the contract documents.

The design professional is not expected to produce error-free contract documents. Courts realize architect-engineering design work is an extremely complex undertaking. Designers are tasked with providing reasonable care and skill in preparing the contract documents. To successfully sue the designer for malpractice, the owner must prove the designer's acts or omissions resulted from his neglect to exercise reasonable care and skill normally expected of a prudent design professional.

Illustrative Case 7-9

A contractor filed suit against the federal government for breach of contract to recover delay damages resulting from inadequate plans and specifications. The U.S. Court of Claims ruled the drawings for an extension to the Department of State Building in Washington, D.C. were not prepared with ordinary care and "were not sufficiently legible or coordinated to permit satisfactory construction". The court ruled the contractor was entitled to reasonable compensation for the resulting delay.65/

Probably the most common designer-caused delay results from design defects. Examples include failure to provide accurate site surveys, coordinate electrical and mechanical designs, failure to accurately depict subsurface conditions, and, quite frequently, problems associated with alteration and rehabilitation work.

Illustrative Case 7-10

A contractor performing space alterations on a government building encountered a defect in the specifications which incorrectly detailed the placement of a wooden pocket for folding partitions. Because new partitions had to be ordered, the contractor was entitled to an extension of contract performance as well as additional costs for expenses incurred.66/

Illustrative Case 7-11

A government contractor working in Panama claimed his work sequence was altered and delayed because of defective plans. The contractor discovered the site plan error during excavation, requiring the government to redesign and issue several change orders causing the contractor to change his work schedule and delay his progress. These delays were compounded upon entering the country's rainy season. The result was a claimed six month delay which the Armed Services Board of Contract Appeals upheld and, thereby, held the contractor was due increased costs he

incurred as a result of the delay.67/

Once the contractor identifies a design deficiency to the owner, he must act diligently to ensure the error is corrected and the appropriate change order is issued. If the design defect is discovered early on, if corrected in a timely manner, chances for delay may be diminished. If, however, the designer is slow in correcting the deficiency or takes an unreasonable amount of time to respond to a contractor's inquiry to a drawing detail or clarification, a compensable delay may result.

Illustrative Case 7-12

A government contractor contracted to supply the Navy several valve assemblies. The contractor claimed he was delayed a total of 400 days while awaiting for replies to nine requests for engineering information. The contractor argued the government should have responded in five days to each request. The Armed Services Board of Contract Appeals ruled the government should have responded within a "reasonably timely manner", in particular 20 days. The contractor was entitled to an adjustment for a delay of 239 days.68/

The design professional is typically tasked with monitoring the contractor's performance by periodically visiting the site, reviewing the contractor's quality control program, and monitoring test results specified in the contract. The designer's responsibilities may include

more frequent inspections depending upon his contract with the owner. In these cases, the designer may provide an inspector to represent him on the site. The inspector's duties and responsibilities are limited to the terms of the construction contract which normally entail acceptance and rejection of the contractor's work. The design professional may also be responsible for some testing, although this arrangement is more likely encountered when using the construction manager (CM) concept. The CM may contract with the owner as a third party to manage the project from inception to completion including such responsibilities as contract administration, inspection, testing, and final acceptance. Or, the CM may perform these duties as well as hire the contractor(s) directly and fulfill the quality control as well as the quality assurance obligations.

Regardless of the arrangement, if the designer or CM acting as a third party delays the contractor for failure to perform their inspection or testing duties in a timely manner, a compensable delay may result. Also, if they reject the contractor's work or require him to uncover work (unless prior inspection was specified) which was later determined in accordance with the specifications or accepted trade practice, the resulting damages are compensable.

Contractor-Caused Delay

There are literally countless ways for a contractor to cause a delay in the completion of the contract. Although many exist, the causes for contractor delays can be categorized as one of the following: a) failure to adequately bid the job, b) poor management, c) insufficient resources, d) poor workmanship, or, e) subcontractor problems.

If the contractor does not thoroughly familiarize himself with the contract provisions before bidding the job, in particular the design requirements and the condition of the site, he may very well underestimate the magnitude of the task at hand. If he is awarded the contract, unless he has some means of recouping his potential losses, he may be forced to cut costs to the point of affecting his progress and thereby, create delays.

More construction businesses falter each year due to poor management than any other reason. Specific causes for delays due to poor management include, failure to coordinate other prime contractors, lack of a sophisticated scheduling system, insufficient capability to manage several separate projects simultaneously, and inadequate means of procuring necessary material and

equipment, to name a few.

Without the necessary resources to do the job, the contractor's scheduling efforts are dead in the water. If the contractor lacks sufficient manpower, materials, equipment, and capital to perform the work, attempts to maintain adequate progress to a timely completion will certainly prove futile.

When the scheduler initially develops the project schedule, he bases the activity durations upon accomplishing the work once. If the owner rejects the work due to faulty workmanship, the time required to remove and reconstruct the deficiency is added to the original schedule. If the defect affects an activity on the critical path, either acceleration is necessary or a delay occurs.

Subcontractors face the same difficulties in managing their work and scheduling efforts as the prime contractor. Failure to recognize and resolve his contractors' delays may adversely affect the prime's overall scheduling scheme and result in a delay in the project.

Construction Schedules

The construction project schedule has become an invaluable tool for all members of the construction team. Not only does an effective schedule illustrate the progress of the project and afford maximum use of the

contractor's resources, but also becomes a critical piece of evidence in resolving claims.

Construction schedules take many different forms, from the simplistic bar chart with a handful of activities for a small project to a computer generated network illustrating thousands of activities for a large, complex project. Any contractor who fails to develop a schedule to suit the needs of his operation risks loss of productivity and a means of documenting excusable delays. Owners are advised to incorporate the requirement for the contractor to provide and update a schedule into their contracts as a means of monitoring progress.

The most widely accepted scheduling technique used throughout the construction industry is the Critical Path Method (CPM). T.H. Setliffe, Vice President of the Florida Office, Wagner Hohns Inglis, Inc., a company specializing in construction claims and litigation services, wrote, "one of the best tools I know for sticking close to reality and hence for avoiding claims situations, is Critical Path Method (CPM) Scheduling. CPM Scheduling provides a way to stay in touch with the facts."69/ The CPM incorporates a logical analysis of the activities to be performed, and illustrates their interrelations and depencies normally through some visual representation. CPMs of any magnitude are normally computer generated affording the scheduler ease of

updating. Standard programs are available which translate the scheduler's logic into a CPM schedule with a print out showing all activities and their associated dependencies.

The courts have generally accepted the construction industry's definition of the critical path method.70/ The trier of fact must recognize, though, courts, boards, and arbitors are not all necessarily familiar with the technique of critical path scheduling and must, therefore, be prepared to illustrate the intricacies of the CPM to defend his position.

The courts have recognized certain requisites for the CPM schedule in order for it to be used as evidence; the schedule must be complete and substantiated. The schedule must completely illustrate all activities pertinent to the project, because anything less would not accurately depict the proposed and completed sequence of work. Whether the schedule is substantiated depends on the authenticity of the data used in developing the schedule, the schedule's purpose, whether it was used for estimating or actual construction, and how the schedule was actually used.71/ The CPM schedule does not automatically become an asset in preparing evidence for litigation. The schedule must satisfy generally accepted legal standards as well as conform to the requirements of the contract. One must keep in mind, the scheduler is the key to an effective schedule. Preparing the schedule accurately and keeping

it updated is paramount to ensuring maximum productivity as well as providing substantial evidence in case of a formal dispute.

CHAPTER EIGHT

CLAIMS MANAGEMENT

Claims are inevitable. Although this statement may seem to carry a negative connotation, owners, contractors, and construction managers must face this fact. As previously defined, a claim is a right (or at least a perceived right) belonging to the parties of the contract. Human nature is such that if we perceive our rights have been violated, we will do everything within our power (and hopefully within the law) to recover what we believe is rightfully ours. Members of the construction team would greatly benefit from acknowledging this principal. The results would likely include a reduction in the number of claims submitted, or at least a more empathetic and expedient process in managing the claims.

The term claims management may take on different interpretations. A negative approach to claims management may define the term as an organized system to receive, analyze, and resolve claims. The problem with this definition is the process occurs far too late in the construction scenario. The factors affecting the potential for claims are rooted in genesis of the project, long before the ground breaking ceremony takes place.

A more reactive definition of claims management would encompass all the construction team's actions necessary to minimize the likelihood of claims. Although the contractor plays a key role in claims resolution, the owner is the driving force behind an effective claims management program. The owner who fails to take an active position in managing claims and, instead, chooses to react to problems as they arise will soon be faced with cost overruns and delays he simply cannot afford.

Minimizing Claims

Although claims are inevitable, they can certainly be kept to a minimum. Claims occur for many reasons but, they can all be attributed to a breakdown in the management of one or more of the many processes incorporated in the project from design to construction completion. By better managing and controlling these processes from the outset with an understanding of the reality of claims, we can improve our chances for minimizing claims.

No better place to start developing an effective claims management program than the design phase. As noted earlier, contract document errors and omissions create more claims than any other source. Therefore, a more thorough system for reviewing the project documents must

be incorporated during design. This review should include a review within each engineer's discipline as well as a coordination review between applicable disciplines. The specifications also require scrutiny for content as well as compatibility with the drawings. Finally, the general conditions, special provisions, supplementary conditions, and documents incorporated by reference must coordinate with the designer's drawings and specifications. Conflicting provisions are prime sources of claims.

A very important stage of the review process which does not always receive the kind of emphasis it strongly deserves is the constructability review. The constructability review entails an "outsider's" fresh look at the contract documents to determine whether the project can be practically built as presented for bid. The function tasked with this review could examine the documents from the bidders' point of view. The most logical choice for performing this review would be the person(s) responsible for managing the project during construction, whether it is performed by the architect-engineer firm, which is not the norm, a construction manager, or other owner representative. Items to consider while conducting the review include: a) whether the existing conditions are accurately depicted, b) whether access to the site is restricted in any way, c) utility availability, d) contractor work space adequacy,

e) disposal routes and area designation, f) work sequencing, contract duration, and scheduling requirements, g) material availibility, and h) quality management procedures.72/

An interesting approach to constructability reviews in the private sector is to include the contractor in the design reviews, and make him responsible for any deficiencies discovered after contract award (with the exception of unforeseen conditions). His experience in construction techniques, activity durations, and cost can prove invaluable to the success of the project. Advantages to this concept is the contractor can start work with a clear understanding of the task at hand, and, if the contract so specifies, if errors, omissions, or ambiguities are discovered in the contract documents, the contractor will not submit claims for additional time or money.73/

Critics of the contractor review contend the courts have consistently recognized that the owner is ultimately responsible for the adequacy of the contract documents and that such exculpatory clauses as making the contractor responsible for the accuracy of the contract information and visiting the site have been less than binding. However, the contractor may agree to conduct a review for a fee and further agree to make no claims resulting from errors escaping his review. Reasonableness is the key.

The goal of the contractor's review is to enhance the project's constructability and to minimize claims. Expecting the contractor to guarantee the design's accuracy is unconscionable and would not be supported at law.74/

Owners are advised to recognize the importance of a quality design by carefully considering the selection of the design professional. The owner should weigh such factors as experience, availability, performance record, and lastly, fees. Failure to count the cost from the outset of the project by selecting a design firm based primarily on lower fees can lead to disaster. Granted, the common law standard for architect-engineers is to exercise reasonable care and skill in preparing the contract documents but, it's the owner who bears the brunt of the majority of designer's errors and omissions. Thus, the primary factors to consider when selecting the design professional is the firm's success in designing similar projects, the design staff's size and discipline cross-section, outside consultants to be used by the firm, and other owner's recommendations.

Generally, architect-engineer services are secured through negotiations between the owner and the design professional. Professional engineering societies have long argued against competitive bidding based on the premise it does not serve the public's best interests. A

1978 Supreme Court decision ruled the National Society of Professional Engineer's ethical ban on competitive bidding violated the Sherman Antitrust Act. Most federal agencies are barred from the competetive bidding process for design services by the Brooks Act (1972), which mandates selection based on qualifications and demonstated competence.75/ Many states have passed mini-Brooks Acts establishing negotiating standards for state funded projects.

Owners should carefully consider how the contractor's work will be inspected to ensure contract conformance. Placing this responsibility solely with the contractor is like letting the fox guard the henhouse. This approach may be acceptable for small jobs but, for larger projects, the owner should either contract with the designer or an independent source to conduct on-site inspections. If the designer acts as inspector and arbitrator, the potential for conflicts of interest is great considering the tendency to protect his design. Whereas hiring an independent professional to act as the inspector and contract administrator, the owner has someone truly objective to monitor the design and construction. Critics of the latter argue this added layer insulates the owner from the designer and contractor producing ineffective relationships.76/

Define the Responsibilities

Deciding who is going to do what to whom in the construction business is keyed to what is stated in the contract. Delineating responsibilities must be clearly specified in the contract documents, and in particular the general provisions. Ambiguities will certainly lead to a change order or dispute costing the owner more time and money. Standard contract documents defining responsibilities are widely used throughout the construction industry, have withstood the test of time, and should be strongly considered when contracting in the private sector.

The working relationship between members of the construction team is crucial in minimizing claims. Once the responsibilities have been defined in the contract documents, they should be reinforced, if applicable, at the pre-bid and preconstruction conference. When needed, the prebid conference affords potential bidders the opportunity to obtain clarification for any misunderstandings concerning the project. Key players should be present including, if applicable, the owner, architect-engineer, construction manager, inspector, and interested bidders. A representative of the owner should take minutes for subsequent distribution to ensure all

questions are clarified. The preconstruction conference is scheduled after award and prior to issuing the notice to proceed. This meeting affords the parties one last opportunity to clarify any questions concerning the project. The owner will typically call in agencies which may be affected by the construction such as the fire department, local utility, and police department. The owner or his contract administrator should clearly reestablish the parties' responsibilities at this meeting to ensure the project gets off on the right foot.

The responsibility for coordinating the construction activities now shifts to the contractor. Exceptions include when the construction manager concept or separate prime contractors are used. Certain construction manager contracts provide for the CM to hire and manage the contractors' efforts. In this case, the CM assumes the responsibility for coordinating all construction activities. The owner may hire separate prime contractors to perform different portions of the work (site work, structural work, mechanical, electrical, etc.). This arrangement places the responsibility for coordination of the separate primes' work either on the owner or on one of the separate primes, if expressly provided for in the contracts.

Once all responsibilities have been delineated and construction begins, maintaining adequate progress of the

project is crucial. Holding weekly meetings with the construction team members is absolutely essential. Such items as problems encountered during construction, updating the CPM schedule, potential claims, and labor issues can be discussed and managed accordingly to keep the project on schedule.

Change Order Procedures

Once a dispute arises during construction, and the contractor has formally notified the owner of the claim, the problem must receive immediate attention. Deferring the dispute until the project is complete is a mistake, for no other reason than the owner cannot ascertain the final cost. Change clauses are typically incorporated in the contract allowing the owner to make unilateral changes within the scope of the contract. Other change clauses which specify change order procedures to be followed should also be included. These procedures should specify the party authorized to direct and approve changes, steps the contractor must follow when presented with a change, and what costs are reimbursable.

Establishing what party is authorized to make changes to the contract is an important decision. If only the owner has the authority to modify the contract, the change order process may become quite cumbersome. If the owner is represented by the design professional or a

construction manager at the job site, they should be given the authority to make at least minor changes in the work which do not affect the contract price or duration.

When a contractor encounters a condition during construction which is different than indicated in the contract he must provide written notice to the owner. Failure to put the notice in writing prior to proceeding with the changed work may preclude the contractor from recovering any increased costs or time. By the same token, if the owner does not produce a written change order, and the contractor proceeds with the work anyway, he may not recover resulting damages. When in doubt, put it in writing!

Change orders should not be issued between the bid opening and time of award. This has been deemed illegal in public contracting in that it may favor one bidder, because the other bidders were not afforded the opportunity to bid on the changed work. Although it is not uncommon nor illegal to issue change orders concurrent with contract award. Issuing changes at the end of the contract can be quite costly since most of the contractor's workforce and equipment have demobilized plus, he may already have other contract commitments pending. Hiring a second contractor to make the change after the original contract has been completed can also be rather expensive. Changes should be made as needs arise,

not after all the work is nearly completed.

Documentation

Construction lawyers will argue that attorneys don't lose cases, their clients with their lack of foresight lose them. Contract claims settled through formal disputes resolution proceedings are decided based upon facts. Facts are supported by evidence. For the evidence to be creditable, certain criteria must be satisfied. If the evidence is not substantiated or admissable, the plaintiff's case is questionable. The key to producing solid evidence is to develop and conform to a systematic approach to record keeping. Maintaining thorough, accurate, and contemporaneous records is paramount to minimizing the risk of damages resulting from claims.

Maintaining voluminous records to stay out of court is self-defeating. Owners and contractors alike should develop documentation systems to properly manage the project. If records accurately depict the project's daily activities, they should provide satisfactory evidence if needed in court.

The owner, design professional, and contractor should all maintain current sets of plans and specifications. These include changes to the project; approved and unapproved. Problems in communicating changes in the plans to the contractor's work force are alleviated if the

changes are clearly depicted. Processing change orders in a timely manner using the prescribed documents will prevent potentially significant claims. The owner should also maintain a complete inventory of all shop drawings and submittals. He should ensure all submission procedures are followed and approvals are obtained within the specified time frames. Submittal documents originally disapproved should include a statement from the approving authority stipulating the specific reason for disapproval to help expedite the resubmission.

Probably the most important document available in proving or disproving delay claims is the project schedule. Maintaining an accurate schedule may not only be a contract requirement but, as illustrated many times over, can significantly enhance the contractor's productivity. Schedules are often presented in court to illustrate the scheduled and actual completion of activities along the critical path. Claims consultants are often able to recreate a schedule based upon other available documentation but, this is quite costly and could have been prevented if the schedule was properly maintained during construction. Selecting the most appropriate schedule for the project is an important decision. Equally important is keeping the schedule updated. The project manager and contractor should meet regularly to discuss the updated schedule and both sign

off on any changes. As mentioned previously, for the schedule to be used as a creditable source of evidence, it must be a) complete, showing all applicable activities, and b) accurate, depicting the sequence of events as they actually occurred.

In order to have an accurate historical depiction of the construction activities, a daily job diary must be maintained. These daily progress reports are probably the most important documents prepared on the job site. Construction personnel must be properly instructed on what to document. The log should be a bound book. Entries sould be made every day preferably by the same person throughout the life of the project. Each entry should be made legibly in ink, dated and signed by the author. Entries should include such information as weather conditions, number of personnel on the job by specific craft, list of equipment on the site by type, identification number, and whether or not they are operational, detailed description of the work performed, any problems which surfaced, and those problems which were resolved.77/ The daily diary should produce an "as-built" schedule of the project. An accurate diary should allow the writer to subsequently recreate the events of the entire project including pertinent conversations, work in place, and problems encountered. The daily progress reports should be prepared in duplicate with one of the

copies going to the home office. This ensures reports are written daily, not at the end of the week and lend credibility since reports are removed from the site. Photographs can also serve as an excellent means of illustrating job progress.

In order to keep all parties informed throughout the construction phase, periodic job progress meetings must be conducted. They are normally the project manager's responsibility to chair. The owner, contractor, and design professional should be in attendance. Typical agenda items would include any problems encountered which need the principals' attention and concurrence before proceeding with the work. Keeping accurate minutes is very important. Although the progress meeting minutes will not cover the details the daily progress report will, because several key personnel are involved with the information presented in the former versus just one author in the latter, they have more of an impact as evidence.[78] The minutes should be distributed to all attendees and other key personnel indicating each issue addressed during the meeting, items resolved, and individual taskings with applicable suspense dates for responses. The minutes should include a statement which requires those receiving the minutes to respond in writing within, say three days if they contain any errors or omissions. Otherwise, the minutes stand as written and should be documented as such.

Because of the impact change orders can have upon the outcome of a construction project, maintaining a separate change order control log is highly recommended. By incorporating all changes and any corresponding delays into the schedule as well as a change order log, the project manager can have a thorough record of the changes and the resulting impacts to the constrction schedule. The information must be complete including all conversations and events which encompass the change, from inception to completion, whether the proposed change is accomplished or rejected. Delays in preparing the change orders, which may lead to additional compensation for the contractor, should also be documented.

During the course of the project, the owner, contractor, and design professional will write numerous letters to the other parties requesting information, clarification, and decisions, or merely to create a memorandum for the record. Every letter should receive immediate attention with a response in writing. Letters should be clearly and concisely written. They should reveal no hostility such as sarcasm or threatening remarks which could be later held against the drafter. Copies of all correspondence should be maintained by the principal parties chronologically in a separate file.

Claims Recognition

The first step in the process of managing any claim is determining a potential claim exists. Knowing the provisions of the contract coupled with the knowledge of what constitutes a legitimate claim based on experience and knowledge of case history, the owner or contractor can more readily recognize the events which may lead to a claim. Identifying these signals from the outset is crucial to ensuring claims are resolved in a timely manner. Countless circumstances may generate claims. Identifying those which inevitably become disputes deserve special attention.

Once a potential claim situation arises, the problem must be addressed immediately. The contractor, owner, and designer must work as a team to resolve the problem and make adjustments as required. Allowing the problem to escalate to a formal claim situation can invoke bad feelings and place the parties in an adversarial role. A construction project is a prime example of a need to cooperate and graduate. Teamwork is paramount. We must be able to accept the fact we make mistakes and sometimes, setting personal pride aside is necessary. Someone may just have to bite the bullet and accept their resposibility.

When the owner is presented a claim, he must acknowledge he recognizes the claim, deal with it expeditiously, and respond one way or the other by

concurring with or rejecting the claim. His system for managing claims should go into effect by tasking his representative to gather facts, evaluate the claim, and make a recommendation on how to proceed. The owner should request the contractor to supply the facts which generated the claim and the resulting damages. The owner should then be in a position to begin negotiating with the contractor.

Negotiation

Most disputes are settled through negotiations. Owners and contractors are generally reasonable people. The thought of binding arbitration or litigation gives rise to visions of lengthy preparation, attorneys' fees, and further delays in resolving the problems at hand.

The advantages to negotiating claims are numerous. The obvious advantage is timeliness. The sooner a claim can be resolved, the less likely a delay will occur. The contractor can then manage his schedule, cash flow, and work force accordingly without worrying about the outcome of the claim. Also, emerging from successful negotiations tends to break the adversarial barrier which will certainly materialize if both parties allow the claim to escalate to formal disputes resolution proceedings.

The owner drives the train. He brings to the negotiating table his basic objectives and negotiating

strategy. He's armed with the facts of the claim thereby lending credibility to his position. He should also know the contractor's position which places the owner in a better position to negotiate. He must induce an atmosphere of cooperation founded on mutual trust and understanding. Encouraging this type of negotiating environment will certainly pay dividends.

Negotiations will normally proceed by asking and answering questions to establish the facts. Although time and money are normally the key issues, these should not be discussed until all the facts have been established. Knowledge of the contract provisions and case history are absolutely invaluable during these proceedings. Whatever edge one party can obtain, the more likely the claim can be settled at the negotiating level. The mere threat of arbitration or litigation is often enough to settle the claim. In the final analysis, an average settlement is almost certain to be better than a good lawsuit.

CHAPTER NINE

RESOLVING DISPUTES

After all efforts to negotiate a construction claim have been exhausted without reaching an agreement, the parties will then be forced to submit to some formal procedure for resolution. Unfortunately, where negotiations normally settle contract disputes, more often then not, claims are escalated through formal channels because the parties allow their emotions to dictate their positions. Granted, if one has a legitimate right, they should make every effort to ensure their right is upheld, especially if it affects money, time, and most importantly, reputation. However, if the construction team were fully aware of the contract provisions, implied and expressed, and were reasonably familiar with case history, more claims would be resolved through negotiations.

Administrative Procedures

Most construction contracts specify certain administrative procedures to follow when resolving disputes, particularly in the public sector. In the federal government, the contracting officer will analyze a contractor's claim to determine if an equitable adjustment

is justified. The contracting officer's decision is final and binding unless a timely appeal is made, which the contractor can make through the board of contract appeals or directly to a claims court. State and local governments have similar procedures for resolving disputes.79/ When negotiations fail to resolve the claim, the injured party must seek relief through some formal disputes resolution procedure, such as arbitration or litigation.

Arbitration and litigation both have their advantages and disadvantages. Arbitration is normally a much faster means of resolving disputes than litigation. An arbitrator can make the same rulings and awards as a court can make. Arbitration is normally less expensive, although, since the arbitrator or panel is paid by the hour, given a lengthy case and unusual conditions, litigation may actually cost less.

The arbitrator is technically qualified to review the facts and make a ruling, but is not necessarily familiar with the case's legal implications. He may be able to readily comprehend the circumstances affecting the dispute to make a competent ruling but, because his legal background is limited, he may tend to lean toward an equitable rather than a legal solution. The moving party who's case is primarily based upon legal precedent will probably benefit more through the courts. Arbitration is

more private than litigation since court cases become a matter of public record.

Arbitration is less formal than litigation, which may or may not be an advantage. Rules of evidence and discovery, for example, are not strictly adhered to in arbitration. The arbitrator may allow hearsay evidence to support a position whereas in a court of law, it would be inadmissable. The parties should determine whether the advantages of discovery in obtaining information from the other party will benefit their position. If so, taking the claim to court may be to their advantage.

Whether it is more beneficial to arbitrate than litigate depends upon the particular dispute. The moving party must carefully consider his legal position before pursuing a particular means of resolution. Depending upon the contract, the parties may have no choice but to automatically submit to arbitration if negotiations fail to reach an agreement.

Arbitration

Whether or not the parties want to submit to arbitration is dependent upon the contents of the contract or their mutual agreement to do so. If binding arbitration is called for in the contract, both parties must agree to waive the provision if they wish to go to

court instead. Otherwise, the dispute will be settled through arbitration.

The American Arbitration Association maintains the means for arbitration of disputes in many fields, including construction. The AAA has established procedures for selecting and training arbitrators, as well as maintaining necessary records and coordinating hearings. Arbitration fees go to the Association and the arbitrators.

Arbitration is relatively new to the construction industry. In 1966, 600 construction dispute cases went to arbitration while in 1978, 2400 disputes were settled through arbitration. The AAA estimates more than half of the construction contracts in force today include arbitration clauses.80/ Most large public sector and state government agencies use the courts to resolve disputes because of the legal questions surrounding committing public funds through arbitration. Some local public agencies are, however, including arbitration in their contracts.

In private sector contracts, where the majority of binding arbitration clauses are incorporated, the term binding means the parties give up their protection from pursuing formal legal proceedings, that is, litigation. The arbitrators ruling is final. The settlement may only

be appealed under exceptional cicumstances such as: 1) the award was obtained through fraud, 2) the arbitrator was obviously impartial, 3) conduct of the arbitration proceedings was prejudiced by one of the parties, or 4) the arbitrator exceeded his power.[81/] A party may request modification of the award under the rules of the AAA, which the arbitrator may agree to or, more likely, affirm it.

The trend within the construction industry is to make greater use of arbitration. Arbitration is generally faster and less expensive. It is best suited for disputes of a factual nature, but is not the forum to settle claims centered around legal implications. These disputes are more appropriately decided in court.

Litigation

In the absence of contract provisions for arbitration or mutual desire to arbitrate, the courts are the forum disputants use to find relief. The contractor will generally seek to adjudicate the dispute within the jurisdiction of the construction site. Pertinent records are located at the field office plus, review of the site by the court is often beneficial. The plaintiff may have the option to choose among different forums to bring a suit. Jurisdictions differ concerning rules of evidence, appropriate defenses, and degrees of culpability. For

example, federal courts have more lenient discovery procedures than state courts.82/

The parties also must decide whether to present the case to a judge or jury. The choice depends upon the nature of the case. Procedural differences may favor a jury trial because appeals courts will be less likely to overturn a judge's ruling. Cases involving emotional factors may also favor a jury trial because the lawyers can play on the jurists' sympathies, whereas a judge may be much more objective. Time is a consideration due to often lengthy jury selections and busy court dockets. If the evidence supporting the claim is complicated, a jury may become too confused to render a reasonable decision.83/

The courts offer far less flexibility than arbitration. The litigants must follow strict rules of evidence and are bound by the difficult scheduling restrictions of the court. The most important aspect of litigation is the substantiation of the claim through factual documentation. Without sufficient evidence, the facts of the litigant's case cannot be substantiated. Discovery is the procedure which obligates opposing counsel to provide information pertinent to the case. This enables both sides to know the facts affecting the case before going to court.

Discovery proceedings involve primarily depositions and interrogatories. Depositions are statements from witnesses, oral or written. Interrogatories are questions from opposing counsel requesting written responses, which are valuable in sorting out details of a complex construction project. Failure to cooperate in discovery proceedings may constitute a violation of the right to a fair trial.84/

Presenting the evidence at the trial is probably the most important part of the litigation process. Accurately establishing the facts by presenting documents and demonstrative evidence, and questioning record and expert witnesses is crucial to supporting a case. Equally important are the opening and closing arguments. Counsels' opening arguments set the tone for their clients' case by introducing the position they intend to take, while closing arguments summarize the facts of the case and endeavors to leave the judge or jury with a clear understanding of the necessary outcome.85/

CHAPTER TEN

CONCLUSION

The number of claims and their associated costs have increased considerably in recent years. The specific reasons for this increase are numerous, but can be attributed almost without fail to someone's failure to adequately count the cost of the task at hand. Either the owner tried to minimize his expenses by hiring an architect-engineer based upon the firm's fees rather than their reputation, the architect-engineer failed in his design efforts to sufficiently depict the project's parameters, or the contractor failed to consider the entire project scope when bidding the contract. The contract parties must thoroughly assess their obligations of the task at hand before the contract is signed in order to minimize the potential for claims.

Selecting the appropriate contract type is an important decision based primarily upon the needs of the owner and how he wishes to manage his risk. Public contracting is generally more restrictive in that competetive bidding is used almost exclusively, whereby the contract is awarded to the lowest responsive, responsible bidder. Equally important as selecting the appropriate contract is properly expressing the contract

language. General rules of interpretation dictate how the contract is discharged. How the parties interpret and act upon the disputed clause during the course of the contract weighs heavily on the court's interpretation. Also, ambiguities will invaribly be interpreted against the drafter if both parties' interpretations are reasonable. An owner's use of exculpatory language in an attempt to shift the risk to the contractor has proven to be less than effective in court not to mention produces inflated bids in order to cover contingencies.

This report focused on the different types of claims one may encounter during a construction project. Although contract claims could be categorized in any particular format, this author chose to analyze them as constructive changes, acceleration, changed condition, schedule change, and delays. By reviewing case history of each particular claims category, one can develop a strategy if faced with a dispute. Knowledge of the legal aspects of construction contracting and claims case history will greatly benefit the contract parties. By recognizing from the early stages of the dispute whether a valid claim exists, the parties can more readily resolve their differences. Allowing the claim to escalate to a formal disputes forum almost always guarantees increased costs.

Although one can reasonably state claims are inevitable, one must recognize they certainly can be

minimized. By carefully selecting the design professional for the project and clearly defining the construction team members' responsibilities, the owner will have taken a giant step toward reducing the likelihood of claims. An essential element of an effective claims management program is documentation. By developing an accurate, contemporaneous record of key construction activities, one can produce admissible evidence to prove or disprove a claim in court. The value of an accurate daily job diary and updated progress schedule cannot be overstated, especially when trying to substantiate a project delay.

For the construction team to be effective, they must develop a cohesive, empathetic relationship. Construction projects are managed by people with all their varying personalities who must occasionally set aside their pride and admit their mistakes. Acknowledging a problem exists is the first step toward resolving any dispute. If the parties are unable to resolve the claim through negotiations, they will likely submit to some formal disputes forum, which is unfortunate since there are really no winners in court. Arbitration has grown in popularity in recent years because it is generally faster and less expensive than litigation.

Probably the most significant concept derived from this study is that construction law can be as diverse and complex as the field of engineering in that there are no

absolutes and reasonable judgement often dictates the solution of the problem. The key to managing claims is to thoroughly understand the contents of the contract, develop a comprehensive documentation system, and become familiar with claims case history. Armed with these tools, one can more readily resolve the claim at the negotiating table than be forced into court.

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